

What is claimed is:

1. A method of operating a telecommunications device with a plurality of dataports, comprising:
 - selecting a master clock signal from at least one clock source;
 - generating a synchronized reference clock signal from the master clock signal;
 - dividing the synchronized reference clock signal to generate at least one synchronized derivative clock signal;
 - coupling each at least one synchronized derivative clock signal to one or more of the plurality of dataports; and
 - transceiving data synchronized to the master clock signal on each of the plurality of dataports.
2. The method of claim 1, wherein at least one of the plurality of dataports is a synchronous dataport.
3. The method of claim 1, wherein the telecommunications device is a G.SHDSL compatible device.
4. The method of claim 1, wherein the plurality of dataports is selected from the group consisting of a V.35 interface, a G.SHDSL interface, a RS-232 interface, and a E1 interface.
5. The method of claim 1, wherein dividing the synchronized reference clock signal to generate at least one synchronized derivative clock signal further comprises dividing the synchronized reference clock signal by an integer value N to generate at least one synchronized derivative clock.
6. The method of claim 5, wherein the integer value of N is selected from the range of 1 to 36.

7. The method of claim 1, wherein dividing the synchronized reference clock signal to generate at least one synchronized derivative clock signal further comprises generating each at least one synchronized derivative clock signal as a multiple of 64kHz.

8. The method of claim 1, further comprising:
coupling the transceived synchronized data from the plurality of dataports to and from an external network dataport.

9. The method of claim 8, wherein the external network dataport is a G.SHDSL dataport.

10. The method of claim 8, wherein a total of the data transceiving capability per unit of time of the plurality of dataports matches a data transceiving capability per unit of time of the external network dataport.

11. A method of operating a telecommunications device with a plurality of dataports, comprising:
selecting a master clock signal from at least one clock source;
dividing the master clock signal to generate at least one derivative clock signal;
synchronizing each of the at least one derivative clock signal to the master clock signal;
coupling each at least one synchronized derivative clock signal to one or more of the plurality of dataports; and
transceiving data synchronized to the master clock signal on each of the plurality of dataports.

12. A method of operating a communications device with a plurality of dataports, comprising:
recovering a master clock signal from a source dataport;
generating a synchronized reference clock signal from the master clock signal;

dividing the synchronized reference clock signal to generate at least one synchronized derivative clock signal;
coupling each at least one synchronized derivative clock signal to one or more of the plurality of dataports; and
transceiving data synchronized to the master clock signal on each of the plurality of dataports.

13. The method of claim 12, wherein the source dataport is selectable from a plurality of dataports.
14. A method of operating a G.SHDSL device, comprising:
recovering a master clock signal from a first dataport;
deriving a synchronized clock signal from the master clock signal;
coupling the synchronized clock signal to a second dataport;
transceiving data on the first dataport; and
transceiving data synchronized to the master clock signal of the first dataport on the second dataport.
15. The method of claim 14, further comprising:
coupling transceiving data on the first dataport and the transceived synchronized data from second dataport to and from a G.SHDSL interface.
16. The method of claim 14, wherein the first dataport is a E1 interface and the second dataport is a V.35 interface.
17. The method of claim 14, wherein deriving the synchronized clock signal further comprises deriving a synchronized clock signal that is equal to the master clock signal divided by an integer value N.
18. The method of claim 17, wherein the integer value of N is selected from the range of 1 to 36.

19. The method of claim 14, wherein deriving the synchronized clock signal further comprises deriving the synchronized clock signal as a multiple of 64kHz.

20. The method of claim 15, wherein sum of the data transceiving bandwidth of the first and the second dataports is equal to the data transceiving bandwidth of the G.SHDSL interface.

21. A machine-readable medium having machine readable instructions stored thereon for execution by a processor of a telecommunications device to perform a method comprising:
receiving a master clock signal from a clock source;
deriving at least one synchronized clock signal from the master clock signal;
coupling each at least one synchronized clock signal to one or more of the plurality of dataports; and
transceiving data synchronized to the master clock signal on each of the plurality of dataports.

22. The machine-readable medium of claim 21, wherein the clock source is selectable from a plurality of clock sources.

23. The machine-readable medium of claim 21, wherein the telecommunications device is a G.SHDSL compatible device.

24. The machine-readable medium of claim 21, wherein the plurality of dataports is selected from the group consisting of a V.35 interface, and a E1 interface.

25. The machine-readable medium of claim 21, wherein deriving at least one synchronized clock signal further comprises deriving at least one synchronized clock signal that is equal to the master clock signal divided by an integer value N.

26. The machine-readable medium of claim 25, wherein the integer value of N is selected from the range of 1 to 36.

27. The machine-readable medium of claim 21, wherein deriving at least one synchronized clock signal further comprises deriving each at least one synchronized clock signal as a multiple of 64kHz.

28. The machine-readable medium of claim 21, further comprising:
coupling the transceived synchronized data from the plurality of dataports to and from an external network dataport.

29. The method of claim 28, wherein the external network dataport is a G.SHDSL dataport.

30. The method of claim 28, wherein a total of the data transceiving capability per unit of time of the plurality of dataports matches a data transceiving capability per unit of time of the external network dataport.

31. A communications device, comprising:
a plurality of local interfaces; and
a master clock source, where at least one synchronized clock signal is generated from the master clock source and where each at least one generated synchronized clock signal coupled to one or more of the plurality of local interfaces to transceive data synchronized to the master clock source on each of the plurality of local interfaces.

32. The communications device of claim 31, wherein the master clock source is selectable from a plurality of clock sources.

33. The communications device of claim 31, wherein the communications device is a G.SHDSL compatible device.

34. The communications device of claim 31, wherein the plurality of local interfaces is selected from the group consisting of a V.35 interface, and a E1 interface.

35. The communications device of claim 31, wherein the at least one synchronized clock signal further comprises generating at least one synchronized clock signal that is equal to the master clock source divided by an integer value N.

36. The communications device of claim 35, wherein the integer value of N is selected from the range of 1 to 36.

37. The communications device of claim 31, wherein the at least one generated synchronized clock signal is a multiple of 64kHz.

38. The communications device of claim 31, further comprising:
an external interface, where the external interface transceives data from an external communication link to the plurality of local interfaces.

39. The communications device of claim 38, wherein the external interface is a G.SHDSL interface.

40. The communications device of claim 38, wherein a total of data transceived on the local interfaces per unit of time is matched to the data transceived per unit of time on the external interface.

41. A telecommunications device, comprising:
a plurality of local interfaces; and
a source clock, where the source clock is recovered from a local interface of the plurality of local interfaces and at least one synchronized clock signal is generated from the source clock and coupled to one or more of the plurality of local interfaces to transceive data synchronized to the source clock on each of

the plurality of local interfaces.

42. A G.SHDSL communications device, comprising:
 - a G.SHDSL interface;
 - a first interface; and
 - a second interface, where a source clock is recovered from the second interface and a synchronized clock signal is generated from the source clock and coupled to first interface to transceive data synchronized to the source clock of the E1 interface, where data transceived from the second and first interfaces is transceived to the G.SHDSL interface.
43. The G.SHDSL communications device of claim 42, wherein the first interface is a V.35 interface and the second interface is a E1 interface.
44. The G.SHDSL communications device of claim 42, wherein the synchronized clock signal is generated to equal to the master clock signal divided by an integer value N.
45. The G.SHDSL communications device of claim 44, wherein the integer value of N is selected from the range of 1 to 36.
46. The G.SHDSL communications device of claim 42, wherein the synchronized clock signal is generated as a multiple of 64kHz.
47. The G.SHDSL communications device of claim 42, wherein sum of the data transceived on of the first and the second interfaces per unit of time is equal to the data transceived per unit of time on the G.SHDSL interface.
48. A In a telecommunications device having a plurality of local interfaces, and an external interface coupled to the plurality of local interfaces, a multiple interface clock synchronization method, comprising:

receiving a master clock signal from a clock source;

deriving at least one synchronized clock signal from the master clock signal;

coupling each at least one synchronized clock signal to one or more of the plurality of dataports; and

transceiving data synchronized to the master clock signal on each of the plurality of dataports.

49. A method of operating a G.SHDSL device with a plurality of dataports, comprising:

selecting a master clock signal from at least one clock source;

generating a synchronized reference clock signal from the master clock signal;

dividing the synchronized reference clock signal to generate at least one synchronized derivative clock signal;

coupling each at least one synchronized derivative clock signal to one or more of the plurality of dataports; and

transceiving data synchronized to the master clock signal on each of the plurality of dataports.

50. The method of claim 49, wherein at least one of the plurality of dataports is a synchronous dataport.

51. The method of claim 49, wherein the plurality of dataports is selected from the group consisting of a V.35 interface, a G.SHDSL interface, a RS-232 interface, and a E1 interface.

52. The method of claim 49, wherein dividing the synchronized reference clock signal to generate at least one synchronized derivative clock signal further comprises dividing the synchronized reference clock signal by an integer value N to generate at least one synchronized derivative clock.

53. The method of claim 52, wherein the integer value of N is selected from the range

of 1 to 36.

54. The method of claim 49, wherein dividing the synchronized reference clock signal to generate at least one synchronized derivative clock signal further comprises generating each at least one synchronized derivative clock signal as a multiple of 64kHz.
55. The method of claim 49, further comprising:
coupling the transceived synchronized data from the plurality of dataports to and from an external network dataport.
56. The method of claim 55, wherein the external network dataport is a G.SHDSL dataport.
57. The method of claim 55, wherein a total of the data transceiving capability per unit of time of the plurality of dataports matches a data transceiving capability per unit of time of the external network dataport.
58. A G.SHDSL communications device, comprising:
a plurality of local interfaces; and
a reference clock source, where at least one synchronized clock signal is generated from the reference clock source and where each at least one generated synchronized clock signal coupled to one or more of the plurality of local interfaces to transceive data synchronized to the reference clock source on each of the plurality of local interfaces.
59. The G.SHDSL communications device of claim 58, wherein the reference clock source is selectable from a plurality of clock sources.
60. The G.SHDSL communications device of claim 58, wherein the plurality of local interfaces is selected from the group consisting of a V.35 interface, and a E1

interface.

61. The G.SHDSL communications device of claim 58, wherein the at least one synchronized clock signal further comprises generating at least one synchronized clock signal that is equal to the master clock source divided by an integer value N.
62. The G.SHDSL communications device of claim 61, wherein the integer value of N is selected from the range of 1 to 36.
63. The G.SHDSL communications device of claim 58, wherein the at least one generated synchronized clock signal is a multiple of 64kHz.
64. The G.SHDSL communications device of claim 58, further comprising: an external interface, where the external interface transceives data from an external communication link to the plurality of local interfaces.
65. The G.SHDSL communications device of claim 64, wherein the external interface is a G.SHDSL interface.
66. The G.SHDSL communications device of claim 64, wherein a total of data transceived on the local interfaces per unit of time is matched to the data transceived per unit of time on the external interface.